



Template Engine - EJS

PROGRAMAÇÃO WEB 1

Objetivos de aprendizagem

- Instalar o EJS
- Utilizar as funções básicas do EJS

Agenda

- Instalação
- Exemplo de aplicação
- Exercícios

Instalação EJS

- *Embedded JavaScript Templating*
- Para gerar a estrutura básica de uma API Node.JS com Express.JS + EJS
 1. `npm install express express-generator ejs`
 2. `npx express-generator --view=ejs`
 3. `npm install`

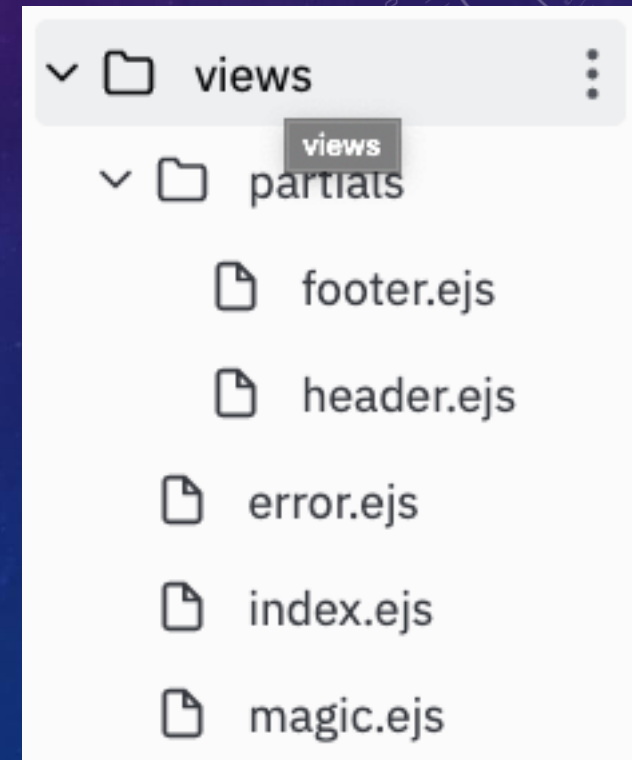
Configurando EJS

- Para usar *Template Engines* no Express basta:
 1. Configurar as variáveis ***views*** e ***views engine***
 2. Conforme abaixo

```
JS app.js x +
> ✕ magicRouter
12
13 // view engine setup
14 app.set('views', path.join(__dirname, 'views'));
15 app.set('view engine', 'ejs');
16
```

Views

- No diretório views criar o arquivo **magic.ejs** e o diretório **partials** e dentro dele criar o arquivos:
 - **footer.ejs**
 - **header.ejs**



Partials

- Fragmentos de código HTML a serem reutilizados
 - Cabeçalhos
 - Rodapés
 - Colunas
 - Sidebars

Partials

- Editar os arquivos
 - `header.ejs`
 - `footer.ejs`

header.ejs

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Random Title</title>
6
7      <!-- CSS link (loading Semantic UI from a CDN) -->
8      <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.4.1/semantic.min.cs:
9      <style>
10         body { padding:50px; }
11     </style>
12 </head>
13 <body class="container">
14
15 <header>
16     <div class="ui inverted menu">
17         <a class="item" href="/">
18             Home
19         </a>
20         <a class="item" href="/magic">
21             Magic
22         </a>
23     </div>
24 </header>
```

footer.ejs

views/partials/footer.ejs ×

```
1 ▼ <div class="ui inverted footer">
2 ▼   <div class="ui container">
3     Topcoder 2021. All Rights Reserved
4   </div>
5 </div>
```

Usando *partials* nas *views*

- Para inserir qualquer partial em uma view:
 - `<%- include("caminho/arquivo.ejs") %>`

views/index.ejs ×

```
1 ▼ <%- include('./partials/header') %>
2 ▼ <main>
3 ▼ <div class="ui segment">
4   <h1>At least we can see something now</h1>
```

Usando *partials* nas views

- Para inserir o cabeçalho e o rodapé no arquivo **index.ejs**, basta:
 - `<%- include('./partials/header') %>`
 - `<%- include('./partials/footer') %>`

views/index.ejs ×

```
1 ▼ <%- include('./partials/header') %>
2 ▼ <main>
3 ▼ <div class="ui segment">
4   <h1>At least we can see something
```

```
19   </ul>
20 ▼ <footer >
21 ▼ <%- include('./partials/footer'); %>
22 </footer>
23
```

index.ejs

views/index.ejs ×

```
1 ▼ <%- include('./partials/header') %>
2 ▼ <main>
3 ▼ <div class="ui segment">
4     <h1>At least we can see something now</h1>
5     <p>This is visual of templating through EJS</p>
6 </div>
7 </main>
8
9 ▼ <footer >
10 ▼ <%- include('./partials/footer'); %>
11 </footer>
12
13 </body>
14 </html>
```


magic.ejs

```
magic.ejs x +  
1 ▼ <%- include('./partials/header') %>  
2 ▼ <main>  
3 ▼   <div class="ui segment">  
4     <h1> Magic route</h1>  
5     <p>This is the magic route</p>  
6   </div>  
7 </main>  
8  
9  
10 ▼ <footer>  
11 ▼   <%- include('./partials/footer') %>  
12 </footer>  
13  
14 </body>  
15 </html>
```

routes

- No diretório routes:
 - Criar **magic.js**

routes/magic.js ×

```
1 var express = require('express');
2 var router = express.Router();
3
4 /* GET users listing. */
5 router.get('/', function(req, res, next) {
6   res.render('magic');
7 });
8
9 module.exports = router;
```

index.js

routes/index.js ×

```
1  var express = require('express');
2  var router = express.Router();
3
4  /* GET home page. */
5  router.get('/', function(req, res, next) {
6
7    res.render('index');
8  });
9
10 module.exports = router;
11
```

app.js

- Em app.js:
 - Incluir a rota /magic

```
7 var indexRouter = require('./routes/index');  
8 //var usersRouter = require('./routes/users');  
9 var magicRouter = require('./routes/magic');
```

```
23 app.use('/', indexRouter);  
24 //app.use('/users', usersRouter);  
25 app.use('/magic', magicRouter);
```

Home

Magic

At least we can see something now

This is visual of templating through EJS

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Home

Magic

Magic route

This is the magic route

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Como fazer?

- Modificar a rota **/users** para utilizar um *template (.ejs)*
- Adicionar a rota **/users** no barra de menu
- Adicionar a rota **/users** no **app.js**
- Acionar a barra de menu ao index

Adicionando dados

- Modificar **users.js**
 - characters
 - subheading

views > users.ejs

```
1 <%- include('./partials/header') %>
2 <main>
3   <div class="ui segment">
4     <h1>As least we can see something now</h1>
5     <p>This is visual of templating through EJS</p>
6     <h2><%= subheading %></h2>
7     <ul>
8       <% characters.forEach(function(character) { %>
9         <li class="ui segment">
10           <strong><%= character.name %> </strong>
11           is <%= character.role %> at Hogwarts.
12         </li>
13       <% }); %>
14     </ul>
15   </div>
16 </main>
17
18 <footer>
19   <%- include('./partials/footer') %>
20 </footer>
21
```

Adicionando dados

- Modificar `users.ejs`
- Para substituir dados de variáveis utiliza-se:
 - `<%= var_name %>`

```
7 </math>
8 <h2>
9   Variable
10 </h2>
11 <p><%= subheading %></p>
12 <ul>
13   <% characters.forEach(function(character) { %>
14     <li class="ui segment">
15       <strong><%= character.name %></strong>
16       is <%= character.role %> at Hogwarts.
17     </li>
18   <% }); %>
19 </ul>
20 <footer >
```

As least we can see something now

This is visual of templating through EJS

I though we should involve some magic

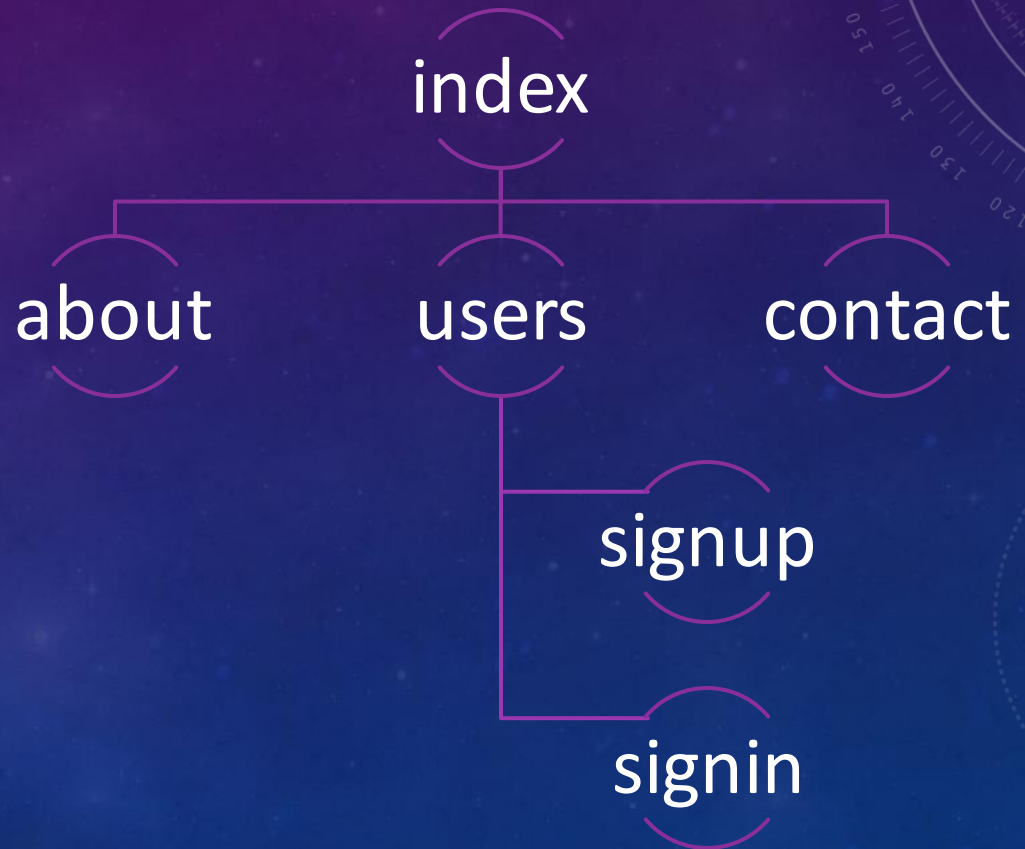
- **Harry** is Student at Hogwarts.
- **Dumbledore** is Headmaster at Hogwarts.
- **Snape** is Professor at Hogwarts.
- **Hermione** is Student at Hogwarts.

Exercício 1

- Reproduzir o site criado na aula usando Replit.com ou a IDE de sua preferência

Exercício 2

- Construir a estrutura básica do site mostrado na árvore ao lado utilizando os elementos:
 - CSS base
 - HTML base
 - Construir a estrutura utilizando o EJS
 - Personalizar com um arquivo HTML simplificado o conteúdo de cada página para diferenciá-las



Referências

- <https://www.topcoder.com/thrive/articles/using-ejs-template-engine-with-express-js>
- <https://ejs.co/>